INSTALLATION MANUAL

MS Dynamics NAV Integration

e-Con 2012

1-12-2011
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Document Information

Title	MS Dynamics NAV Integration
Subject	e-Con 2012
Version	1.0
Status	Final
Solution	
Product	e-Con
Category	Installation Manual
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1. Introduction

This document provides a description of the installation procedure for the e-Con 2012 integration with the Microsoft Dynamics NAV5 and NAV2009 software. The e-Con 2012 installation is described in a separate installation manual for e-Con 2012.

1.1 General Information

Read the system requirements before starting installation. The e-Con 2012 version must be properly installed before the Microsoft Dynamics NAV installation is started.

When installing on Microsoft Windows Terminal Server, the server must be in the "Install" mode. Change the mode manually at the command prompt ("change user/install") or run the setup from the control panel ("Add/Remove Programs").

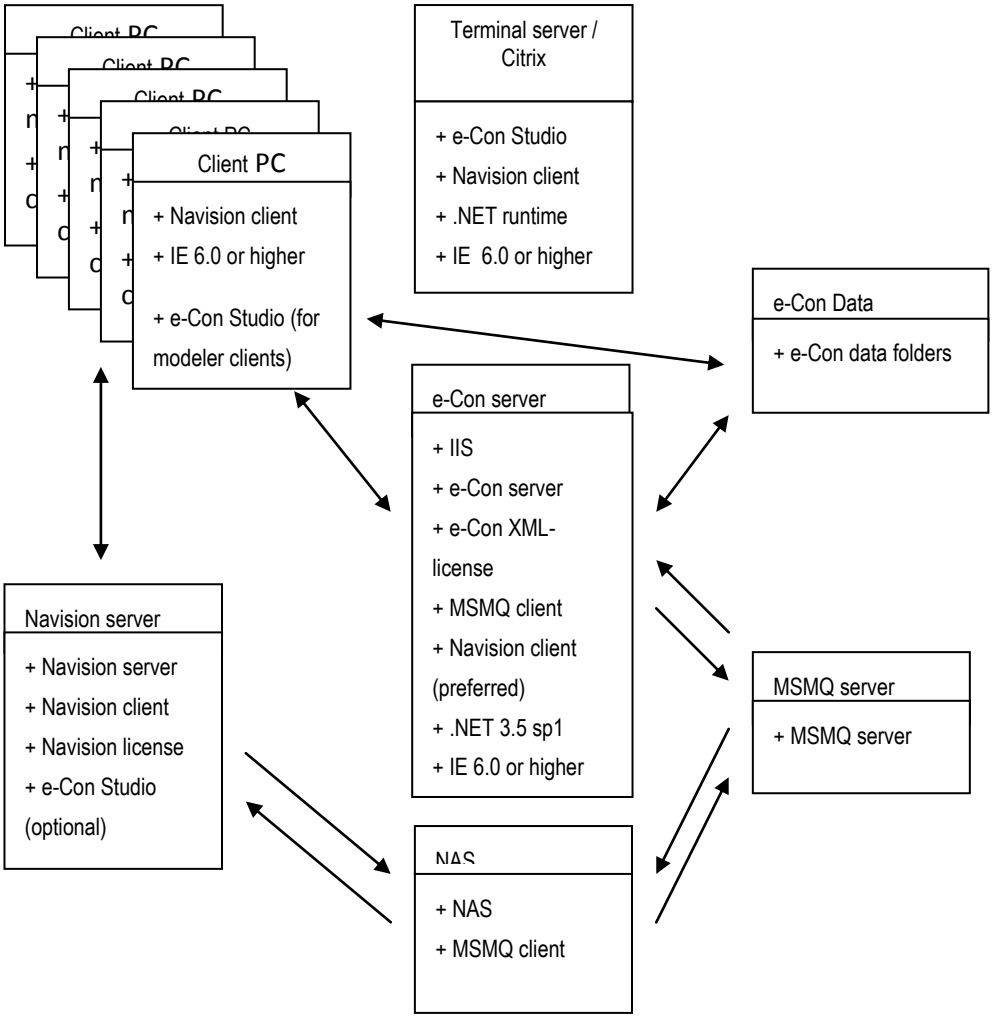
This installation manual assumes that the DMI tool is installed as well.

Please refer to the “Installation Manual DMI and Service Packs” User manual.

2. Installation Scenarios

This chapter describes the most common installation scenarios.

2.1 Schematic view of complex scenario



	Navision Server	e-Con Server	NAS	MSMQ Server	e-Con data	Terminal Server / Citrix	Client PC (modeler and/or configure)
e-Con Server installation		X					
e-Con XML license stored in e-Con server Web folder		X					
e-Con Studio installation	Optional (1)	(3)				X	(4)
Navision Server available	X						
Navision License stored in Navision Server folder	X						
Navision Client available	Optional (1)	Preferred				X	X
NAS available			X				
IIS available		X					
e-Con data folder					X		
MSMQ component installed and setup		X	X	X			
.NET runtime 4 available		X					(4)
IE 6.0 or higher available		X					X
Import e-Con objects, Register and Initialize	(2)	(2)				(2)	(2)

(1) Optional installation of Navision client and e-Con modeler for testing purposes.

(2) Import can be done from every Navision client if available and if access to e-Con Server directory is allowed.

(3) Installed together with e-Con Server.

(4) Just for modeler client PC's

Based on this scenario a couple of other scenarios with combined servers can be extracted. The most common scenarios are explained.

2.2 Navision Server & e-Con Server on different computers. The e-Con data & NAS & MSMQ Server on e-Con Server. No Citrix.

	Navision Server	e-Con Server & e-Con data & NAS & MSMQ Server	Client PC modeler	Client PC configure
e-Con Server installation		X		
e-Con XML license stored in e-Con server Web folder		X		
e-Con Studio installation	Optional (1)	(3)	X	
Navision Server available	X			
Navision License stored in Navision Server folder	X			
Navision Client available	Optional (1)	Preferred	X	X
NAS available		X		
IIS available		X		
e-Con data folder		X		
MSMQ component installed and setup		X		
.NET runtime 4 available		X	X	
IE 6.0 or higher available		X	X	X
Import e-Con objects, Register and Initialize	(2)	(2)	(2)	(2)

(1) Optional installation of Navision client and e-Con modeler for testing purposes.

(2) Import can be done from every Navision client if available and if access to e-Con Server directory is allowed.

(3) Installed together with e-Con Server.

2.3 Navision Server & e-Con Server & e-Con data & NAS & MSMQ Server on the same computer. No Citrix.

	Navision Server & e-Con Server & e-Con data & NAS & MSMQ Server	Client PC modeler	Client PC configure
e-Con Server installation	X		
e-Con XML license stored in e-Con server Web folder	X		
e-Con Studio installation	(3)	X	
Navision Server available	X		
Navision License stored in Navision Server folder	X		
Navision Client available	Preferred	X	X
NAS available	X		
IIS available	X		
e-Con data folder	X		
MSMQ component installed and setup	X		
.NET runtime 4 available	X	X	
IE 6.0 or higher available	X	X	X
Import e-Con objects, Register and Initialize	(2)	(2)	(2)

(1) Optional installation of Navision client and e-Con modeler for testing purposes.

(2) Import can be done from every Navision client if available and if access to e-Con Server directory is allowed.

(3) Installed together with e-Con Server.

2.4 Navision Server & e-Con Server & Citrix on different computers. The e-Con data & NAS & MSMQ Server on e-Con Server.

	Navision Server	e-Con Server & e-Con data & NAS & MSMQ Server	Terminal Server/Citrix
e-Con Server installation		X	
e-Con XML license stored in e-Con server Web folder		X	
e-Con Studio installation	Optional (1)	(3)	X
Navision Server available	X		
Navision License stored in Navision Server folder	X		
Navision Client available	Optional (1)	Preferred	X
NAS available		X	
IIS available		X	
e-Con data folder		X	
MSMQ component installed and setup		X	
.NET runtime 4 available		X	X
IE 6.0 or higher available		X	X
Import e-Con objects, Register and Initialize	(2)	(2)	(2)

(1) Optional installation of Navision client and e-Con modeler for testing purposes.

(2) Import can be done from every Navision client if available and if access to e-Con Server directory is allowed.

(3) Installed together with e-Con Server.

3. General Installation Information

3.1 Navision components

See Navision installation CD for detailed information about installation of Navision Server, Navision Client and NAS installation. The e-Con installation, both Server and Modeler, will not check on the availability of Navision components.

3.2 Typical installation order of components

1. Navision components (Server, Client(s) and NAS) installation, check on Navision license.
2. Copy the *.chm and *.hh help file in your Navision Client language subfolder
3. Import of Navision integration objects in Navision database.
4. Register and Initialize the components.
5. Startup of NAS from a Navision client.
6. Test with demo models.

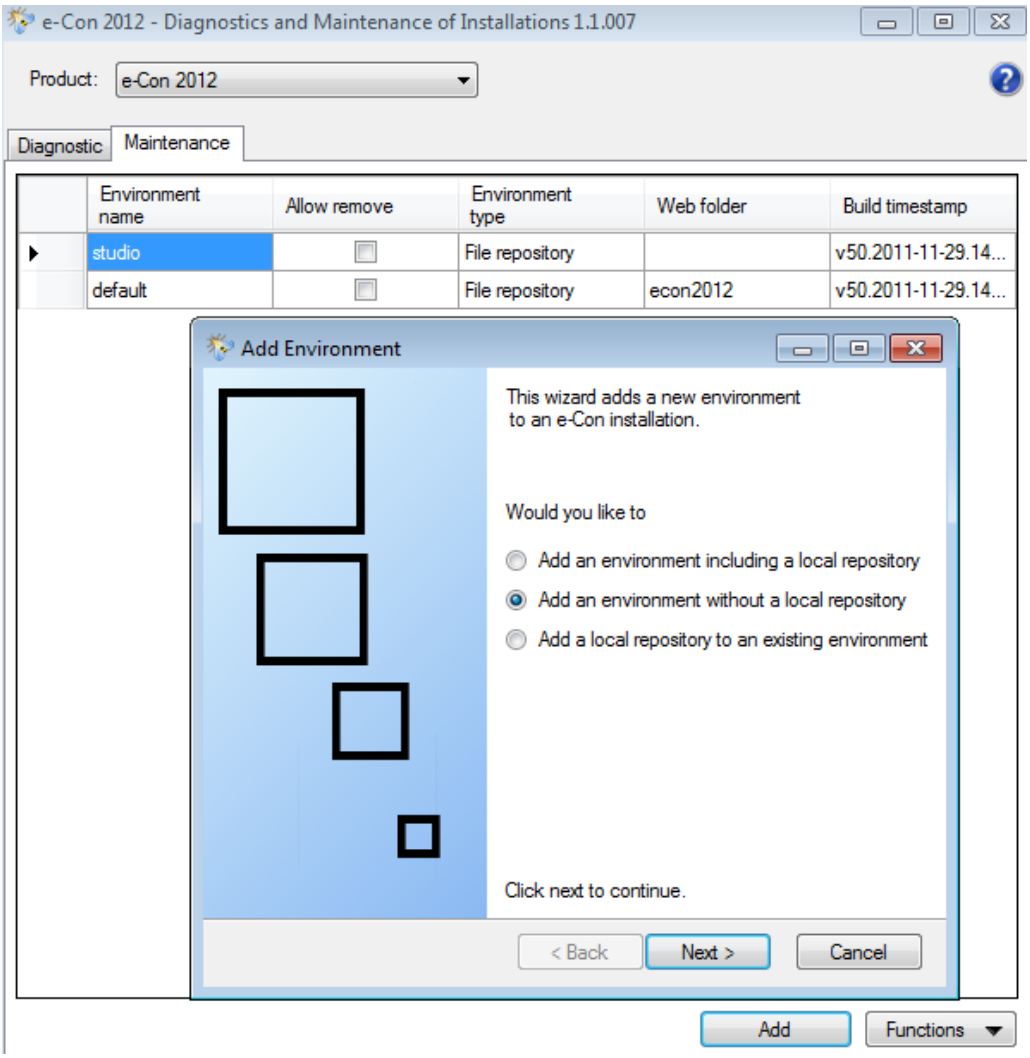
3.3 Use DMI to create an initial e-Con environment for NAV

After installing e-Con 2012, two initial environments are created, called Studio and Default.
Best practice is to leave these two environments alone.

Therefore, a new environment must be created that can be integrated with NAV.
To do this, start DMI.

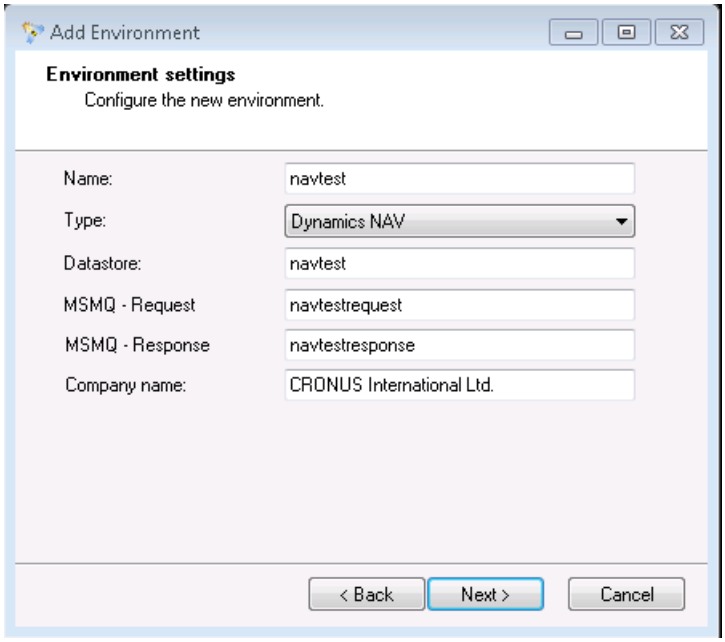
Make sure you select e-Con 2012 version, and go to the Tab called *Maintenance*.
Here, press the *Ad* button (at the bottom of the screen).

Please select *Add an environment without a local repository*, and click Next.



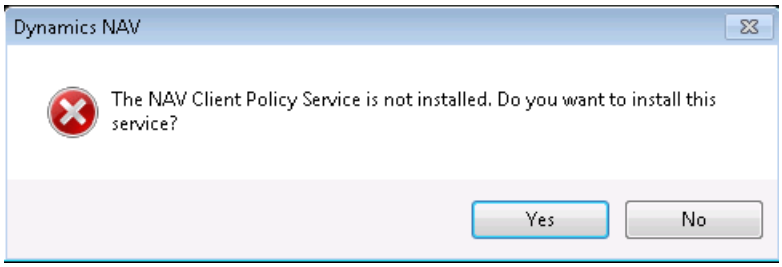
Enter a descriptive name for this environment, for example:

nav<test><cronus> where <test> refers to the purpose of the NAV environment (test, production, development etc) and <cronus> refers to the name of the company in NAV.



Select as type 'Dynamics NAV'.

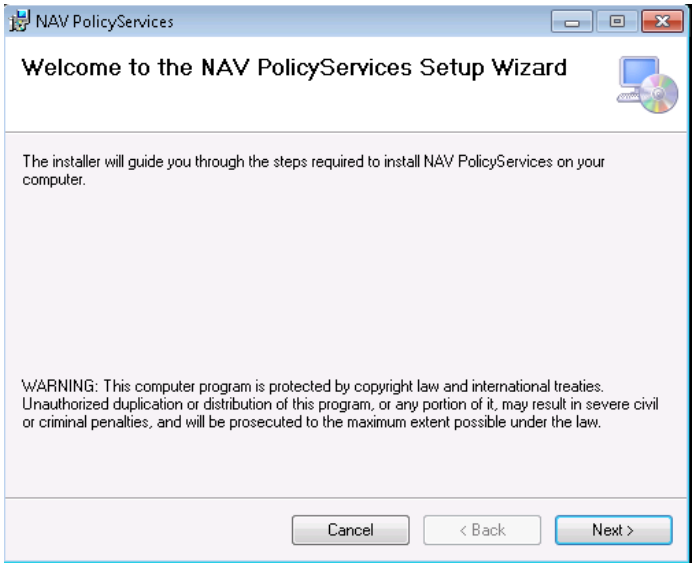
The following message can pop up:



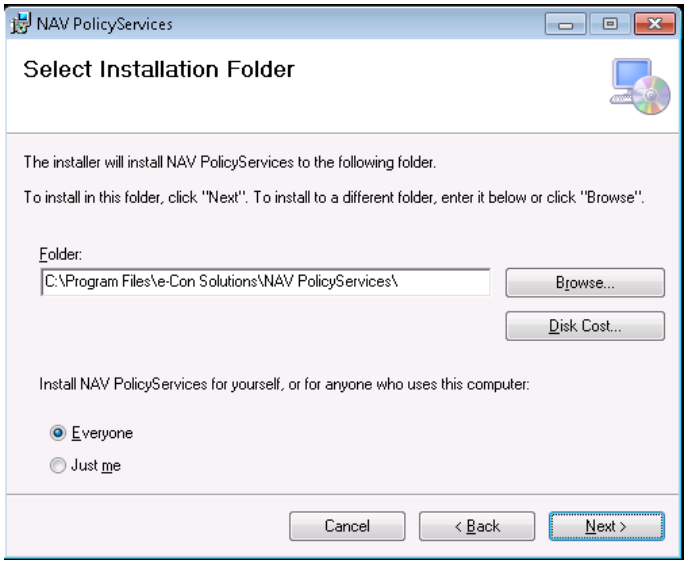
Click “Yes” to install this Policy Service.

Installing the NAV Client Policy Service:

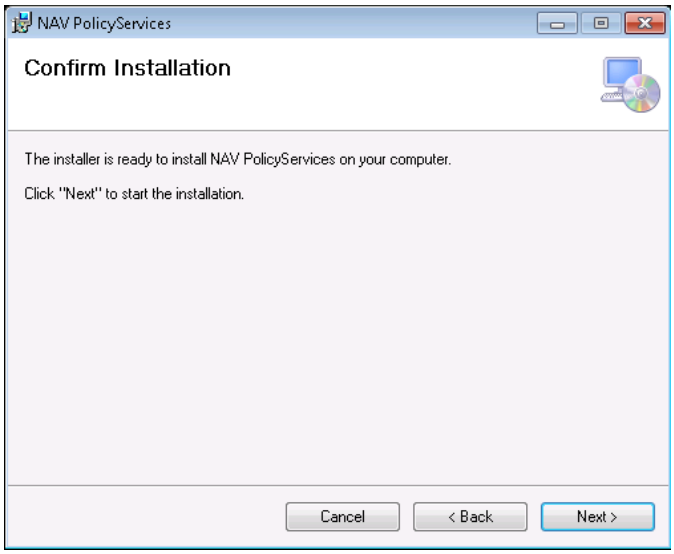
Click next to start installation


NAV PolicyServices
Welcome to the NAV PolicyServices Setup Wizard
The installer will guide you through the steps required to install NAV PolicyServices on your computer.
WARNING: This computer program is protected by copyright law and international treaties. Unauthorized duplication or distribution of this program, or any portion of it, may result in severe civil or criminal penalties, and will be prosecuted to the maximum extent possible under the law.
Cancel
< Back
Next >

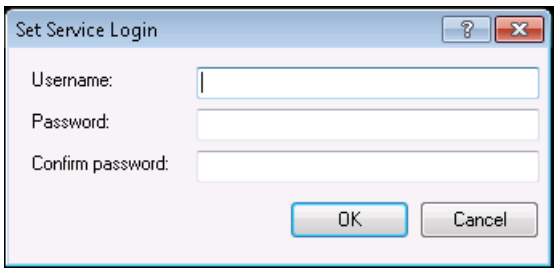
Click next for the default installation location or select a different location.


NAV PolicyServices
Select Installation Folder
The installer will install NAV PolicyServices to the following folder.
To install in this folder, click "Next". To install to a different folder, enter it below or click "Browse".
Folder:
C:\Program Files\e-Con Solutions\NAV PolicyServices\
Browse...
Disk Cost...
Install NAV PolicyServices for yourself, or for anyone who uses this computer:
Everyone
Just me
Cancel
< Back
Next >

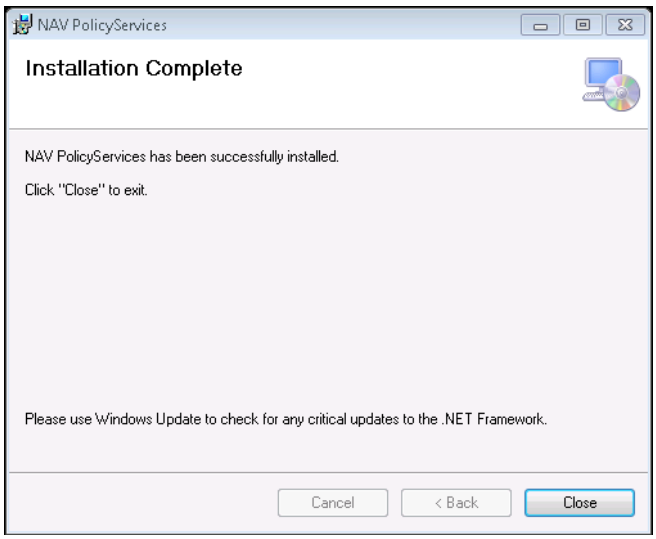
Click next to confirm.


NAV PolicyServices
Confirm Installation
The installer is ready to install NAV PolicyServices on your computer.
Click "Next" to start the installation.
Cancel
< Back
Next >

During installation the installer is asking for a username (a local account) and password. This user will be assigned to the service and will run the service.

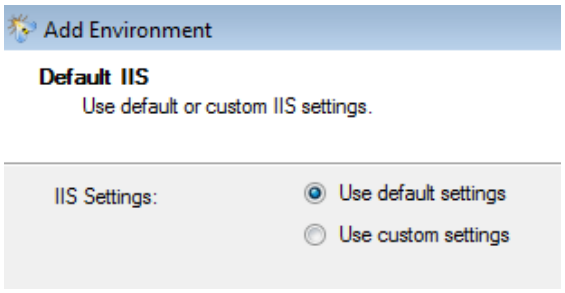


Finally click close to exit the installer and to return to DMI.


NAV PolicyServices
Installation Complete
NAV PolicyServices has been successfully installed.
Click "Close" to exit.
Please use Windows Update to check for any critical updates to the .NET Framework.
Cancel
< Back
Close

Also enter the exact name of the NAV company and click Next.

Enter IIS settings. In general, the default settings will work OK.



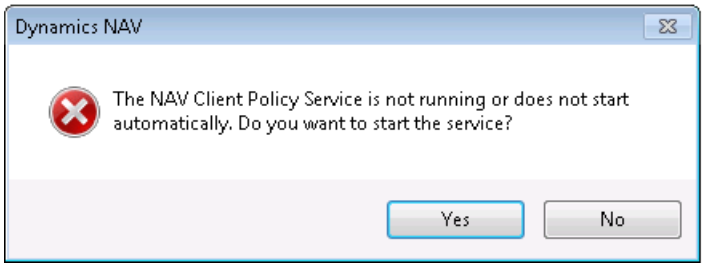
Click Next, then Finish.

Now go back to the first tab page in DMI, and choose *Run tests*.

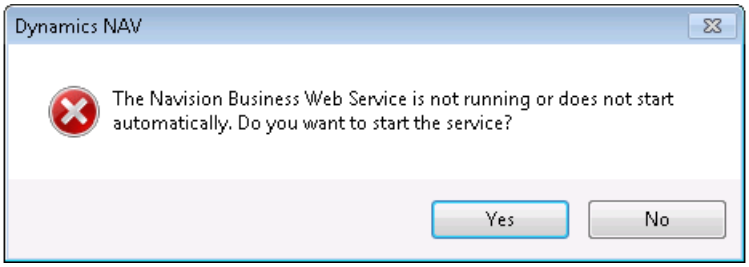
If any warnings appear where the *fix* flag is set, click the Fix button to have the possible issues resolved.

Troubleshooting

Note: if you get a message about the NAV Client Policy Service not running, just confirm to start this service.


Dynamics NAV
The NAV Client Policy Service is not running or does not start automatically. Do you want to start the service?
Yes
No

Note: if you get a message about the Navision Web Service not running, just confirm to start this service.


Dynamics NAV
The Navision Business Web Service is not running or does not start automatically. Do you want to start the service?
Yes
No

3.4 Message Queue

On the e-Con Server computer the Message Queuing Component should be installed before e-Con Server is installed. The e-Con installation will create two default Messages Queues in the Private Queues; “navisionresponse4” and “navisionrequest4”. On computers, e.g. NAS Server or separate MSMQ Server, where the e-Con Server installation is not performed but the Message Queues are needed they should be created manually. See Message Queue Properties Setup chapter for more information.

Note: when DMI is used to create a new NAV environment, it also creates two new message queues.

4. Installation of Navision Integration

Start this step after installation of all the Navision components, Navision Server, Client and NAS. The Navision database should be started with the Navision Server Service.

Before you can use e-Con integrated with Navision, you need to import the Navision e-Con objects into your database (e.g. a customer test database).

The W1, US and NL objects for the 2012 releases and the Windows help files are available on the e-Con Product CD in the Navision\Integration subfolder.

Before we describe the import process of the FOBs we would like to explain the different type of FOBs we distinguish:

- Solution Center FOB N108 (e.g. N108.NAVW16.00.10.R.1101(OBJECTS).fob); this FOB contains the basis application for a certain major release. Most of these objects are in a reserved add-on range and can be imported or replaced. Codeunit 1 contains the integration for the Platform NAS handler. This object can only be replaced if the version is equal.
- The e-Con FOB N043 (e.g. 1101W16.00.01N043); this FOB contains the e-Con application. You can always import these objects in any database without affecting any other existing objects. All objects are in a reserved add-on range.

  The FOB also contains the Connector objects, objects with Name starting with 'Conn.'. Codeunits 11002550 and 11002565 might contain customer specific code. These objects must only be replaced if the NAV version is NAV2009. So please skip them when the NAV environment is a technical upgrade only to NAV2009 and the database is still NAV4 or NAV5.

Execute the following steps to get import the objects and to test the installation:

1. Copy the *.chm and *.hh help file in your Navision Client language subfolder.
2. Open the database.
3. Make a backup copy of the Navision Database.
4. Start the Object Designer (Shift + F12).
5. Import the Navision Object Files for e-Con (Menu File – Import...).
6. Import the Solution Center FOB. Replace all objects in the 11000000 range, merge or replace codeunit 1.

   Note: When installing N108.1101 (or N108.1102) to replace the N108.1002 (or previous versions) the following objects should be deleted:

   All N108 objects with filter 'N108*Test*' in the Name and Forms 11068698 and 11068699.

   This is according to the Solution Center installation documentation.
7. Import the N043 FOB. All objects are in the 11000000 range.

   Note: Skip the Connector codeunits ('Conn. In the Name') and Codeunits 11002550 and 1102565 when database version is not NAV2009.
8. Re-open the Navision Main Menu.
9. Registration and initialization of the installed components, N108 and N043.

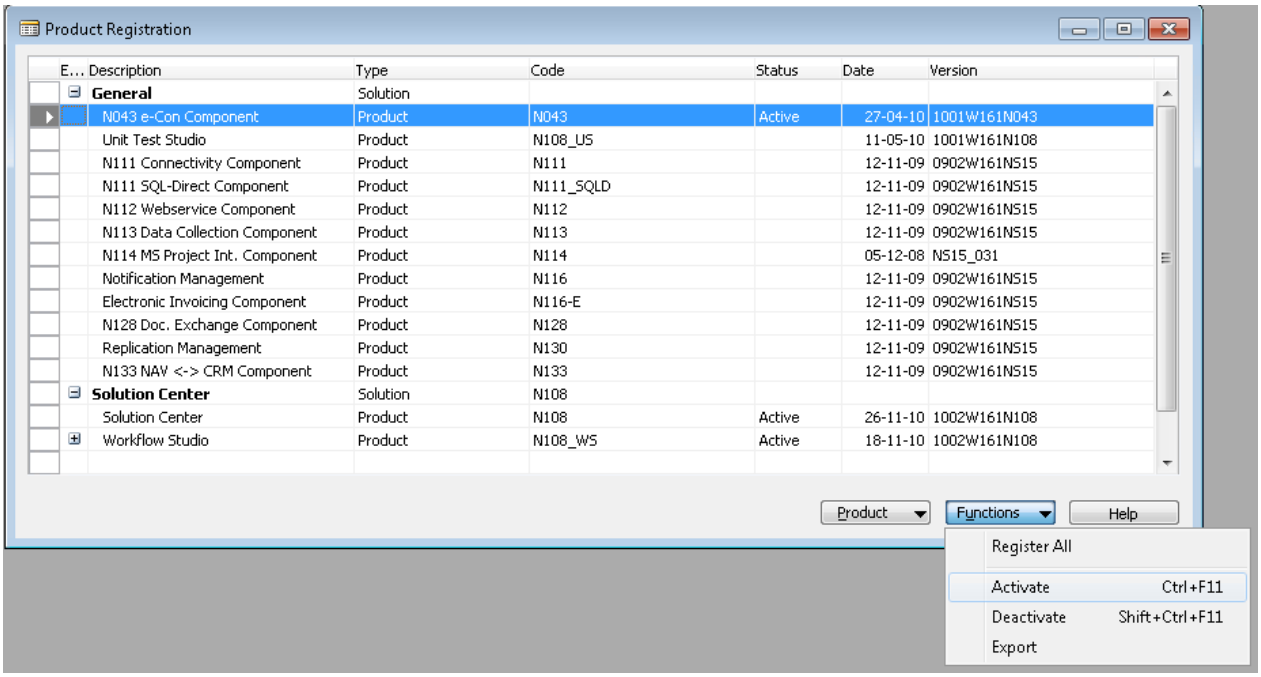
9.1. Open the Business Integration Solutions Menu and go to “Product Registration” – “Product Registration”.

9.2. Run “Register All” via the “Functions” button.

9.3. Select the line for the Solution Center, available in the Solution Center group and run “Activate”.

9.4. Select the line for the N043 e-Con component, available in the General group and run “Activate”.

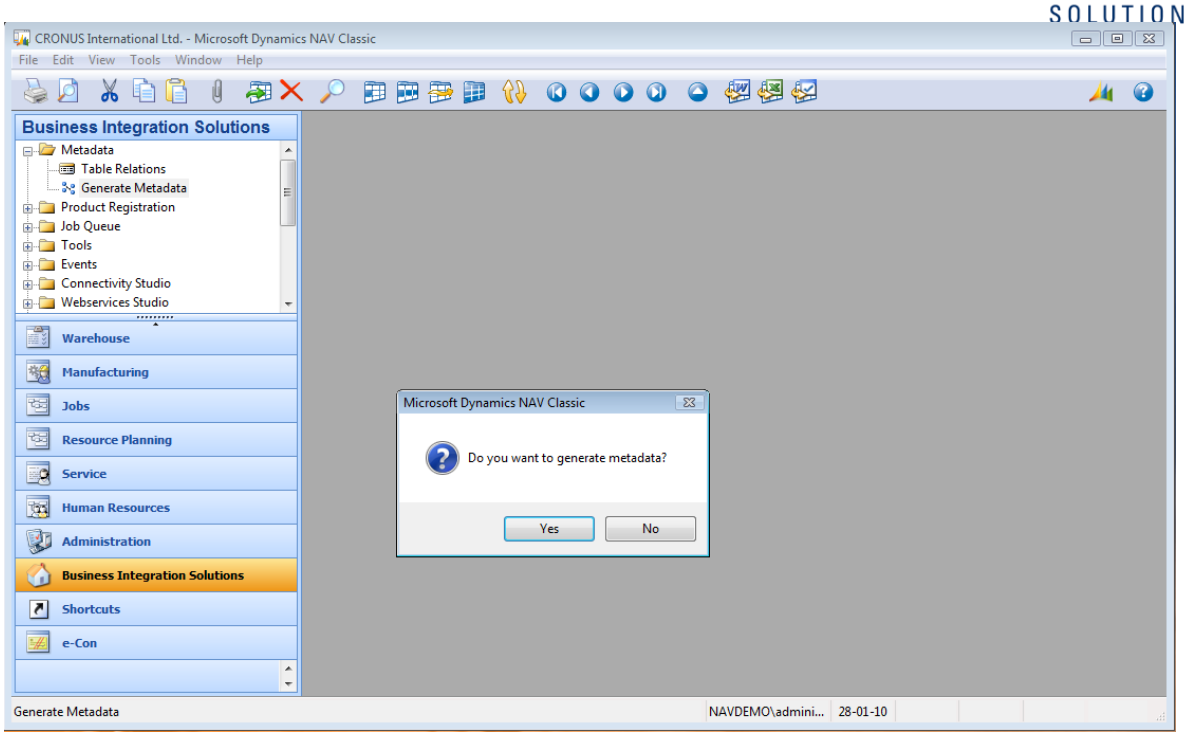
Note: the data in your form may differ from the picture below (depending on installed components).



10. Creation of the Metadata

10.1. Open the Business Integration Solutions Menu and go to “Metadata” – “Generate Metadata”. After “Yes” the metadata will be created.

10.2. Via the “Metadata” – “Table Relations” the results can be checked.

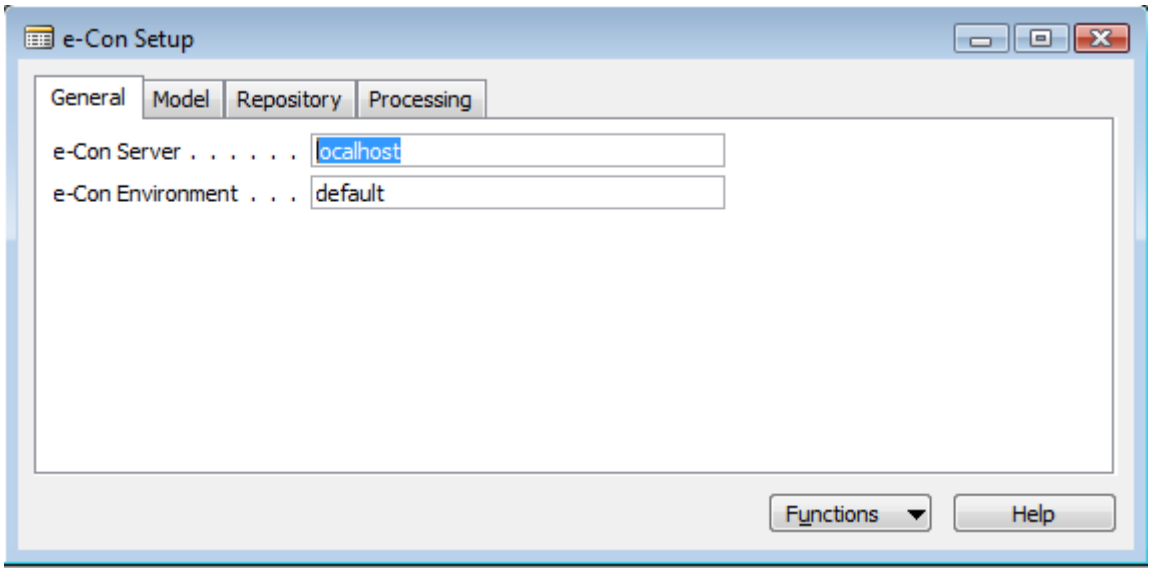


Note: if you get a question to enter a file name when you execute step 10.1, please go to the option to alter the database, go to tab *Options* and select *Enable for Microsoft Dynamics NAV Server*.

11. Change the default environment settings for NAV

    11.1. Open the e-Con Menu and go to “Set up” – “e-Con Setup”.

    11.2. Open the General Tab.



Description of the fields in the General tab of the e-Con Server Setup window.

Fields on General tab	
e-Con Server	The name of the e-Con Server. Normally this is the computer name of the e-Con Server.
e-Con	The name of the environment used by e-Con during configuration

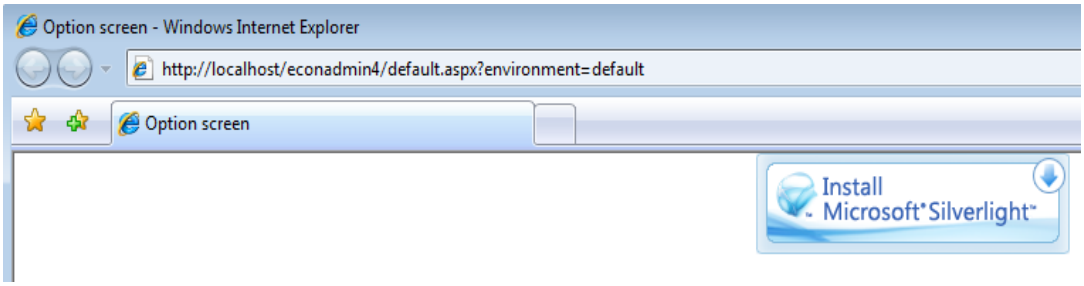
Environment	with all the e-Con specific setup information. It can be accessed by “Functions” – “Edit Environment”. See the Setup document about this.

11.3. Change the value for e-Con server into the e-Con server name

11.4. Change the value for e-Con environment into the name used in 3.3

11.5. You can now check that the input is correct. Open the default e-Con environment via “Functions” – “Edit Environment”.

11.6. When done the first time on the server or a client PC Microsoft Silverlight will be installed. This is a client application that will be used to show the environment settings.



11.7. After installation re-open the default e-Con environment via “Functions”-Ëdit Environment”, just to check the settings.

12. Import and generation of the metadata groups.

12.1. Open the e-Con Menu and go to “Periodic Activities” – “Import / Export” – “Metadata

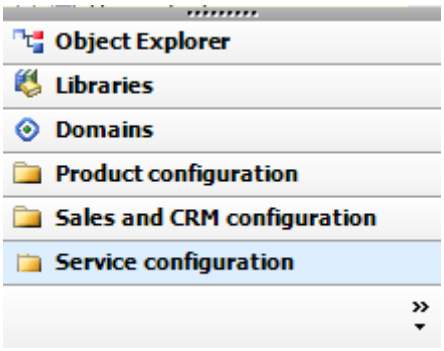
12.2. Table Group”.

12.3. Open the “Options” tab.

12.4. Browse and select the file ‘eConMetadataGroups’. This file can be found on the e-Con product CD in the ‘Integration\’ folder.

12.5. Select “Import” and click “OK” to start the import.

12.6. The result can be tested by opening the e-Con studio. The ‘Product Configuration’, ‘Sales and CRM configuration’ and ‘Service configuration’ groups should be shown up in the tool box.



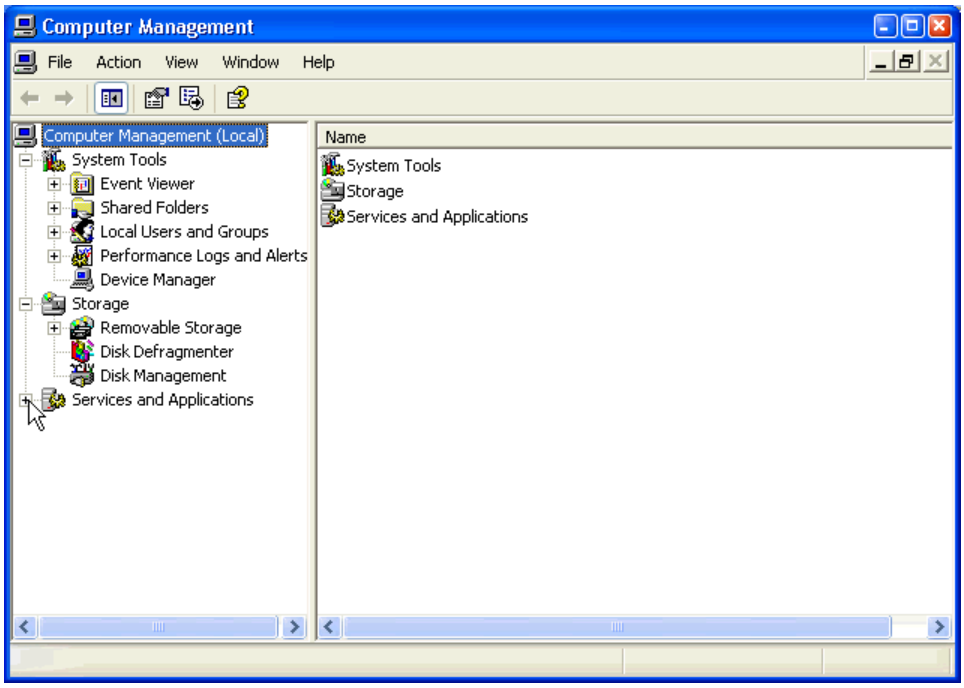
5. Setup Message Queue Properties.

5.1.1 Permissions (Windows 2003 or XP)

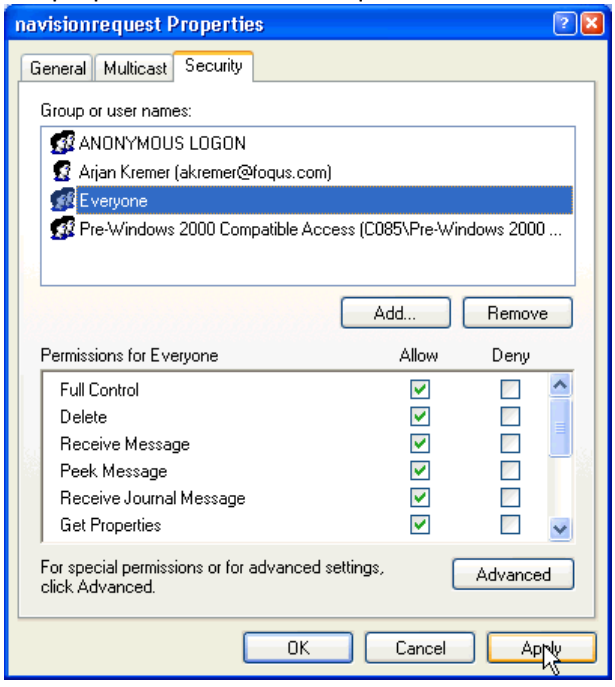
During the e-Con installation two Message Queues are created to be used by the NAS. The permissions for these two Message Queues must be set.

Note: when an environment is created using DMI, the security settings are created in a correct way. The description below is then only for reference purposes.

1. Go to “Computer Management”.



2. Select “Services and Applications” – “Message Queuing” – “Private Queues” and go to the properties of “navisionrequest4”.



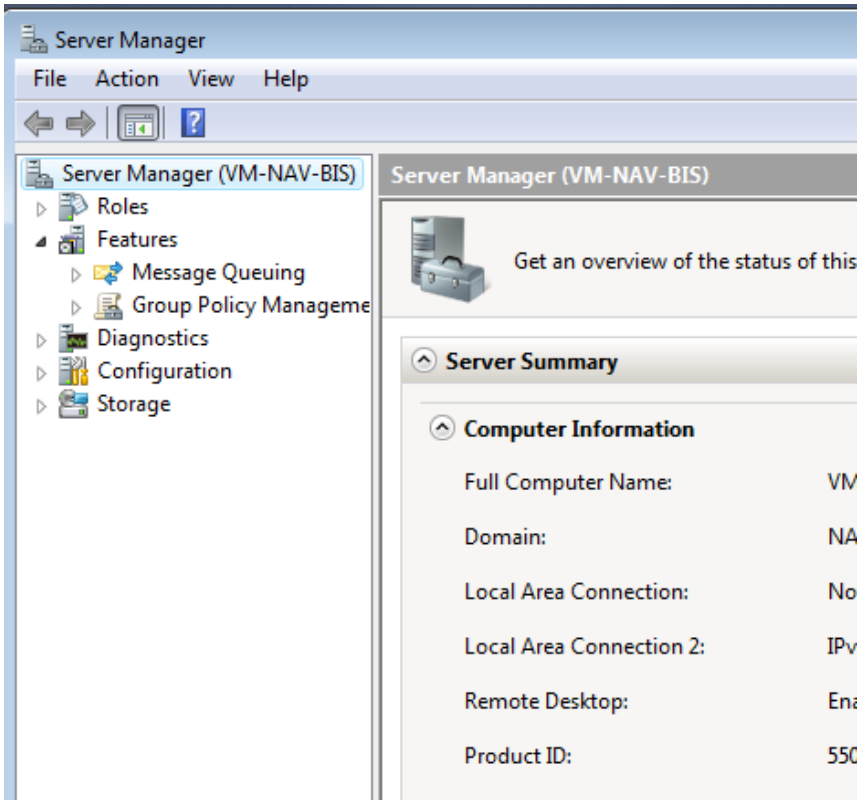
3. Give in the tab “Security” to “everyone”, “Full Control” and “Apply”.

4. Do the same for “navisionresponse4”.

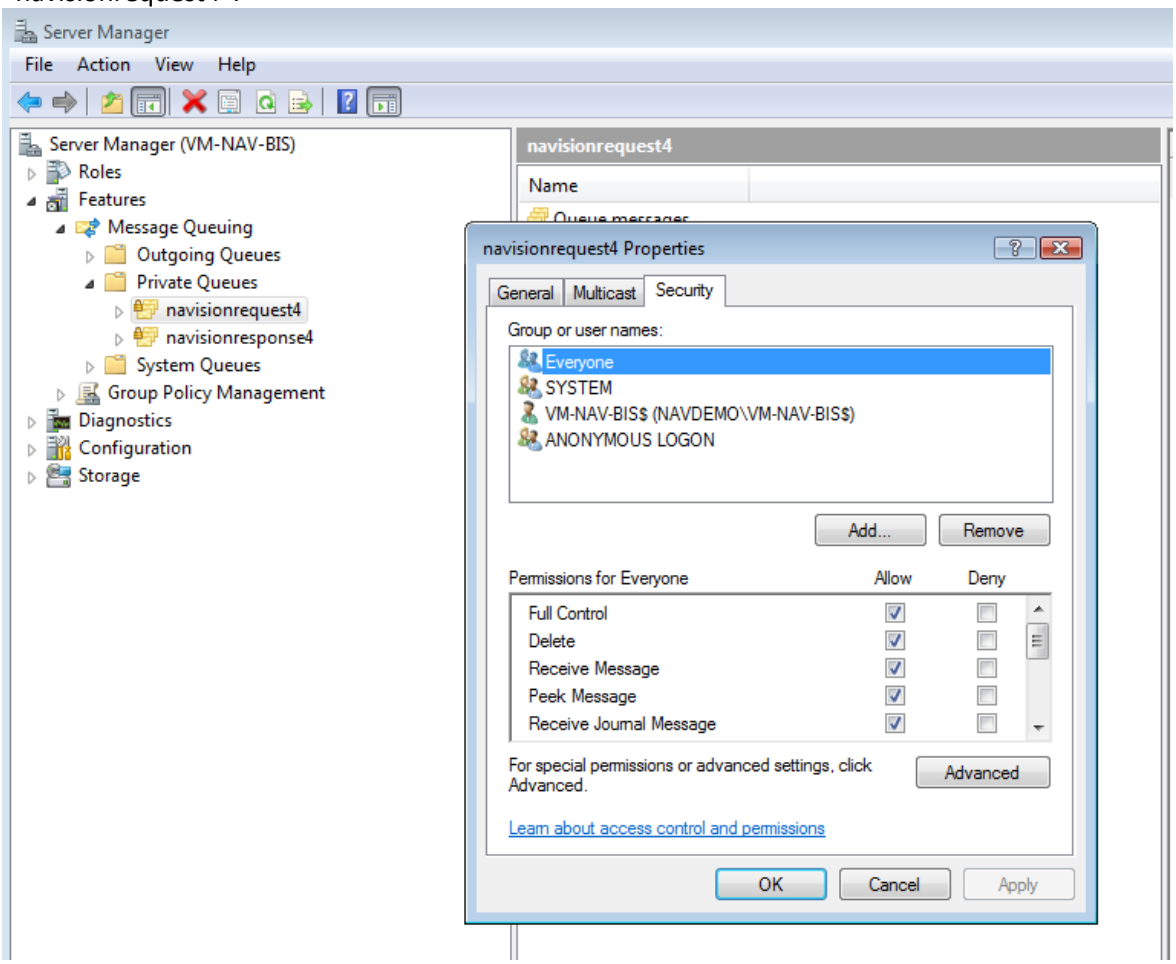
5.1.2 Permissions (Windows 2008 or Windows7)

During the e-Con installation two Message Queues are created to be used by the NAS. The permissions for these two Message Queues must be set.

1. Go to “Computer Manage”.



2. Select “Features” – “Message Queuing” – “Private Queues” and go to the properties of “navisionrequest4”.



3. Give in the tab “Security” to “everyone”, “Full Control” and “Apply”.

4. Do the same for “navisionresponse4”.

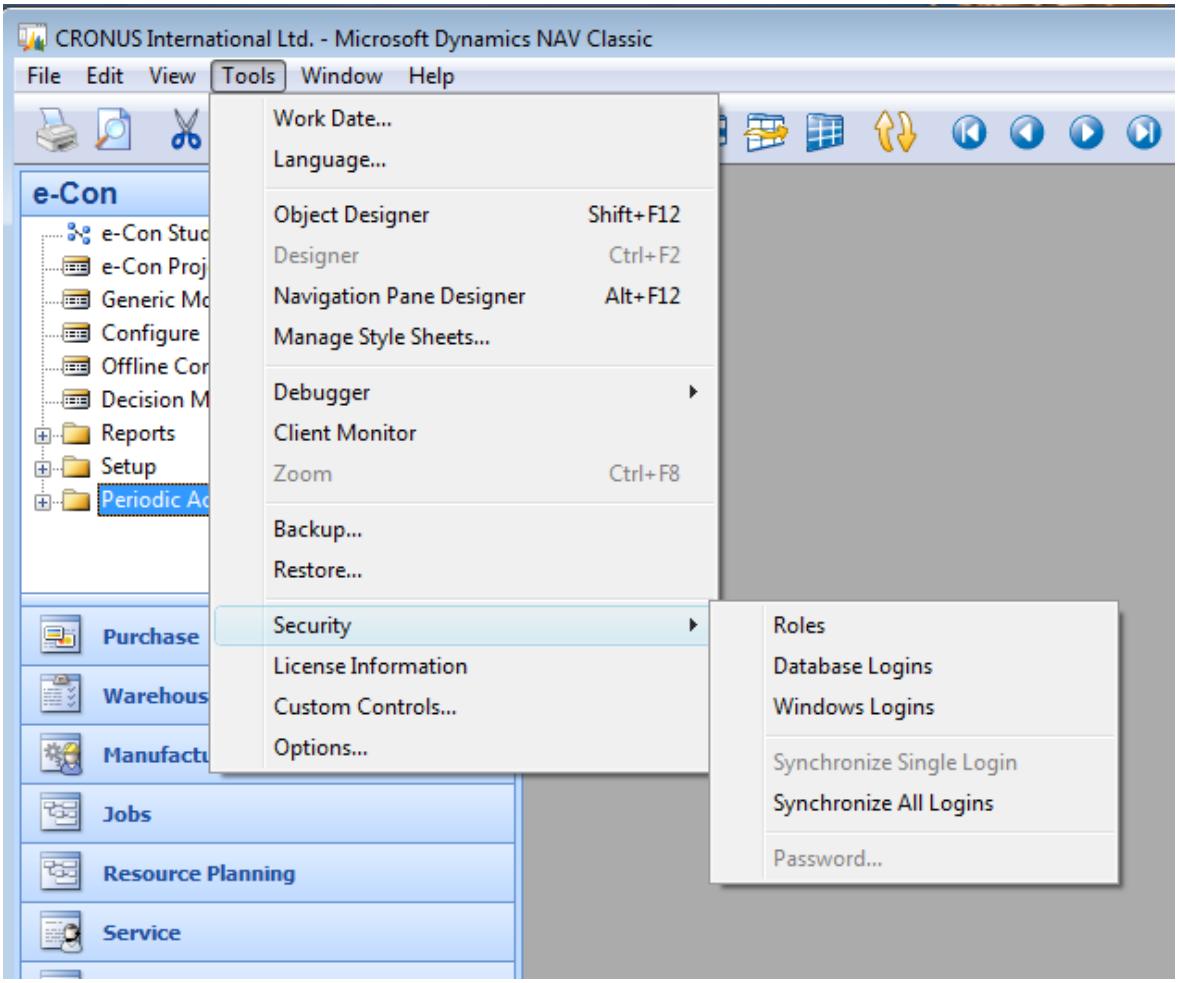
5.1.3 Best Practice

If the e-Con Server and the NAS are running on different systems then the read queue should always be on the local system while the send queue should be on the remote system; that is the navisionrequest4 queue on the system where the NAS is running, the navisionresponse4 queue on the system where the e-Con server is running. This way you will gain a better performance and it will be possible to use a send queue over HTTP, e.g. through a firewall.

6. Startup of NAS from Navision Client.

The NAS will use Windows Logon from Navision. First a Windows Logon must be created, if not available:

1. Go to “Tools” – “Security”- “Windows Logins”.

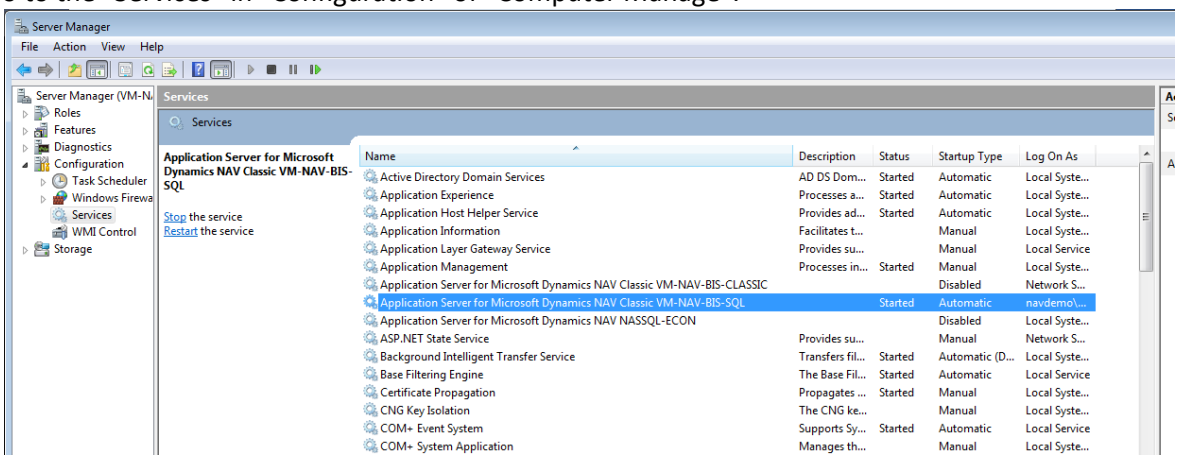


2. Add a proper “Windows Login” and connect a “Role” to it.

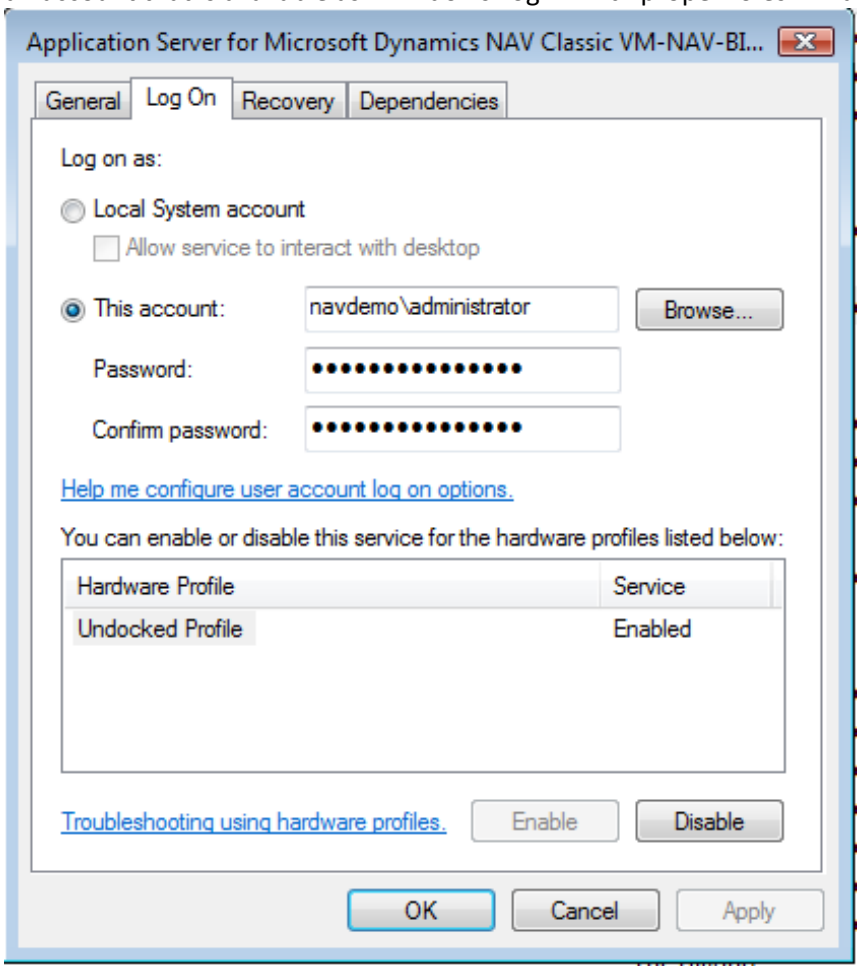
3. If needed Synchronize the new login.

The NAS service must have a “Log on” account that is known as “Windows Login” in Navision. By default it is set to the “Local System” account, so please change this.

1. Go to the “Services” in “Configuration” of “Computer Manage”.



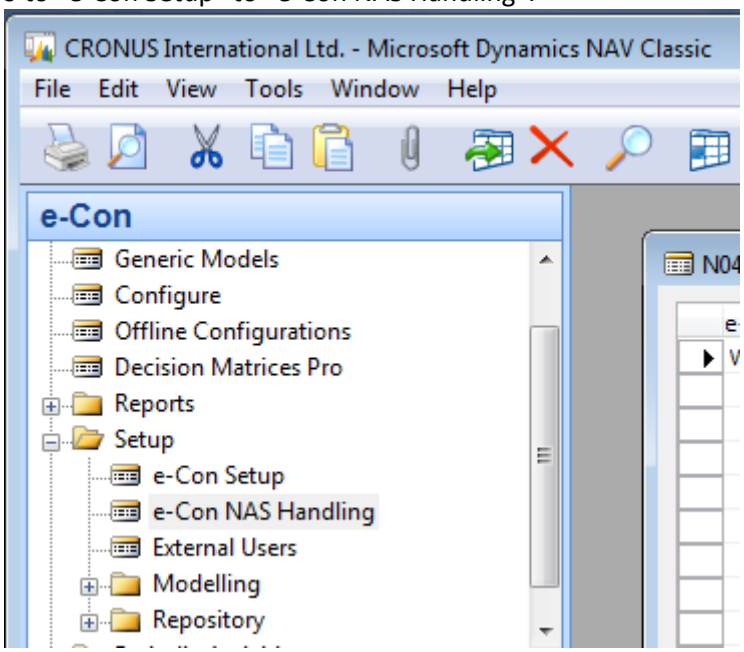
2. Go to the “Properties” of the service and change on the “Log on” tab the “Log on as” to an account that is available as “Windows Login” with proper roles in Navision.



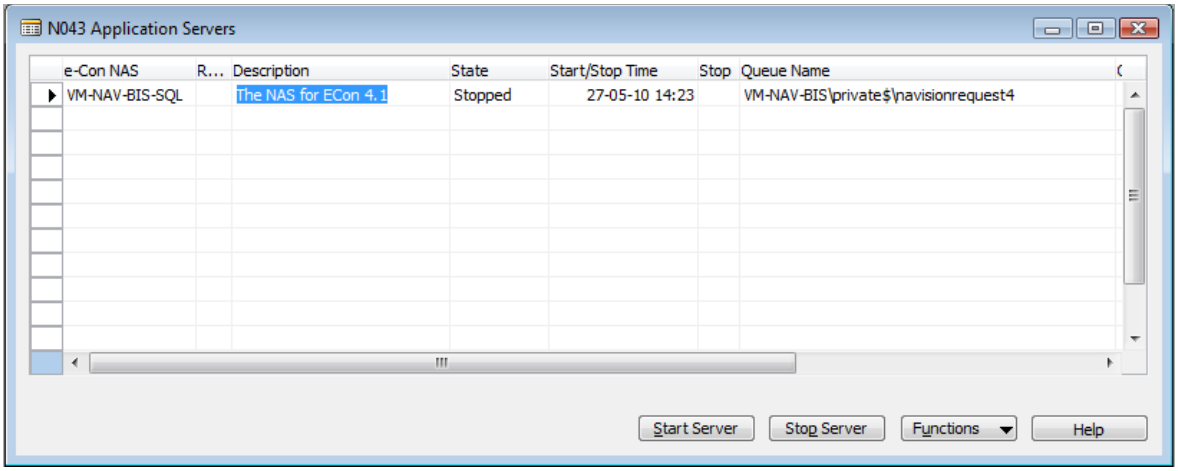
3. “Apply” this setting and leave the services.

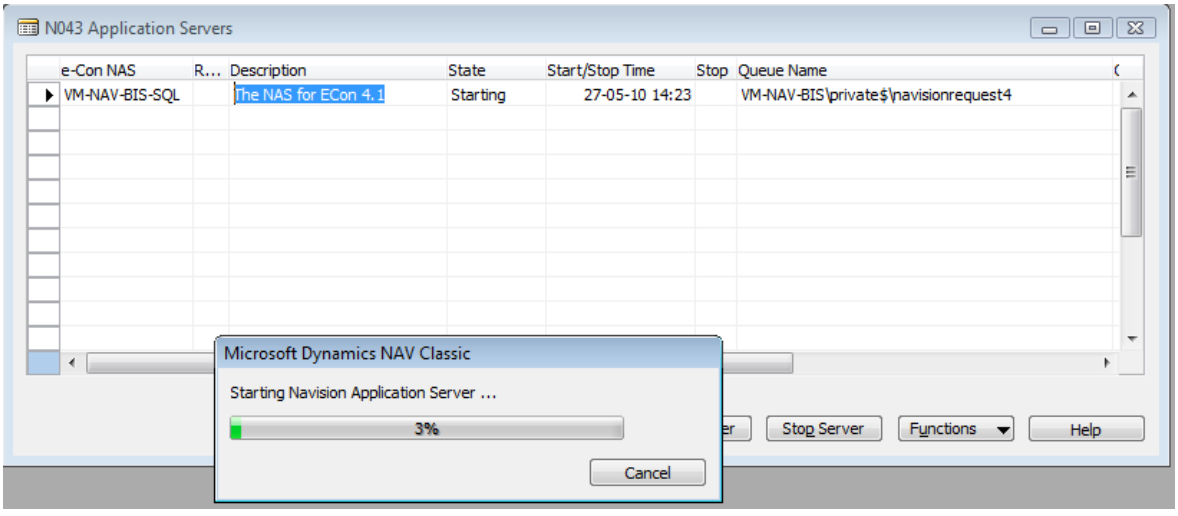
To start the NAS start the Navision client:

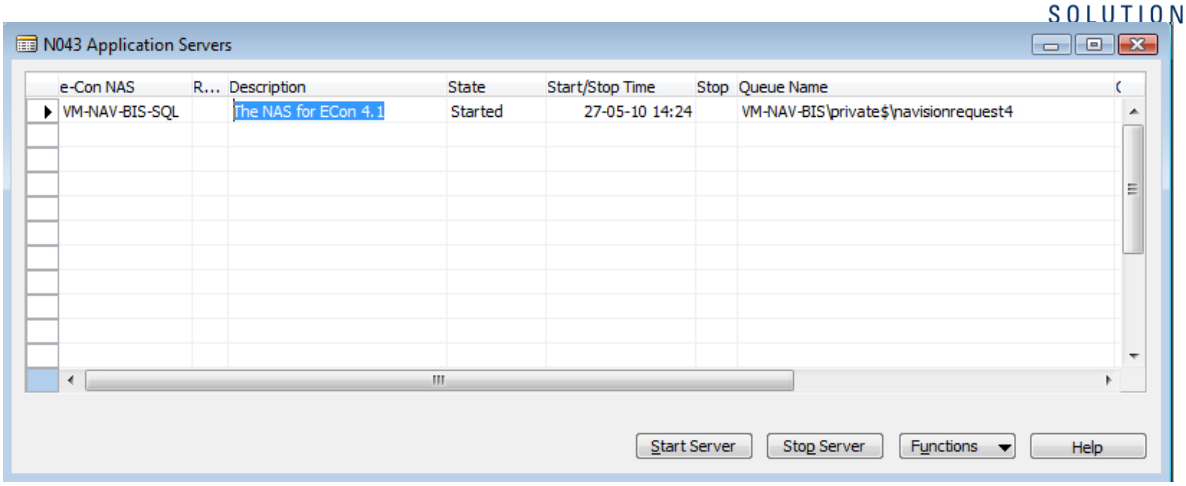
1. Go to “e-Con Setup” to “e-Con NAS Handling”.



2. Fill in the proper “e-Con NAS” name, select the Queue name and push the “Start Server” button. The state should be changed from “Starting” to “Started”.


N043 Application Servers
e-Con NAS R... Description State Start/Stop Time Stop Queue Name
VM-NAV-BIS-SQL The NAS for ECon 4.1 Stopped 27-05-10 14:23 VM-NAV-BIS\private$\navisionrequest4
Start Server
Stop Server
Functions
Help




N043 Application Servers
e-Con NAS
R...
Description
State
Start/Stop Time
Stop
Queue Name
VM-NAV-BIS-SQL
The NAS for ECon 4.1
Started
27-05-10 14:24
VM-NAV-BIS\private$\navisionrequest4
Start Server
Stop Server
Functions
Help

7. Appendix – NAS Technical

7.1 Introduction

This document describes some technical issues concerning the e-Con 2012 and Navision Application Server (NAS) integration. As a prerequisite the NAS should be installed properly on your system as described in the e-Con 2012 installation manual or the NAS installation document that can be found on your Navision Attain installation CD. Furthermore the reader should have some basic knowledge of the Navision Attain programming environment and the MS Windows operating system.

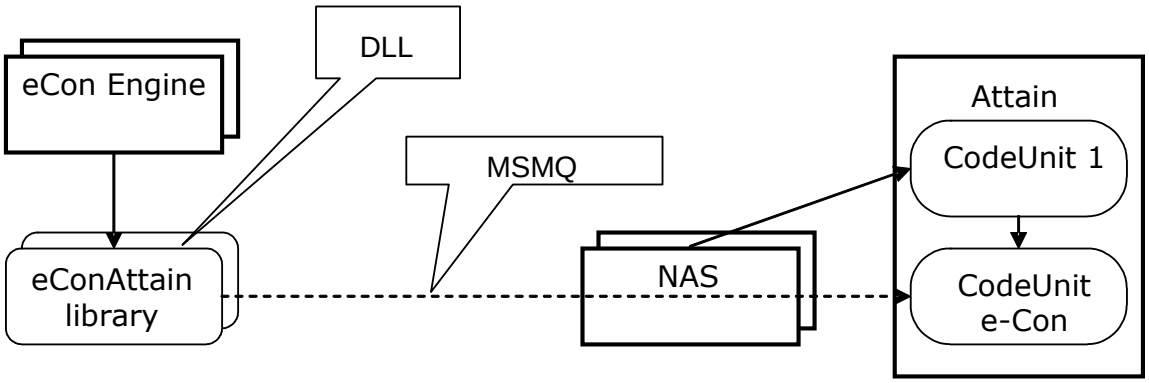
7.2 Description of the NAS

7.2.1 General

The Navision Application Server acts as a faceless client. It connects to a predefined database (server), in a predefined company and runs a predefined function (id=99) in a predefined codeunit (codeunit 1). Any functionality can be triggered as long as it is programmed by a developer and no user interaction is needed. The NAS Startup Parameter allows you to run different parts of code e.g. by means of a CASE statement. Normally the NAS is used to run one or more single-instance codeunits. These codeunits remain in memory and can be triggered by events (e.g. an incoming messages or via a timer interval). This way the NAS can perform different tasks. Running as a service the NAS can be stopped as long as no other tasks are being performed.

7.2.2 For e-Con 2012

The architecture overview of the e-Con 2012 NAS integration looks like this:

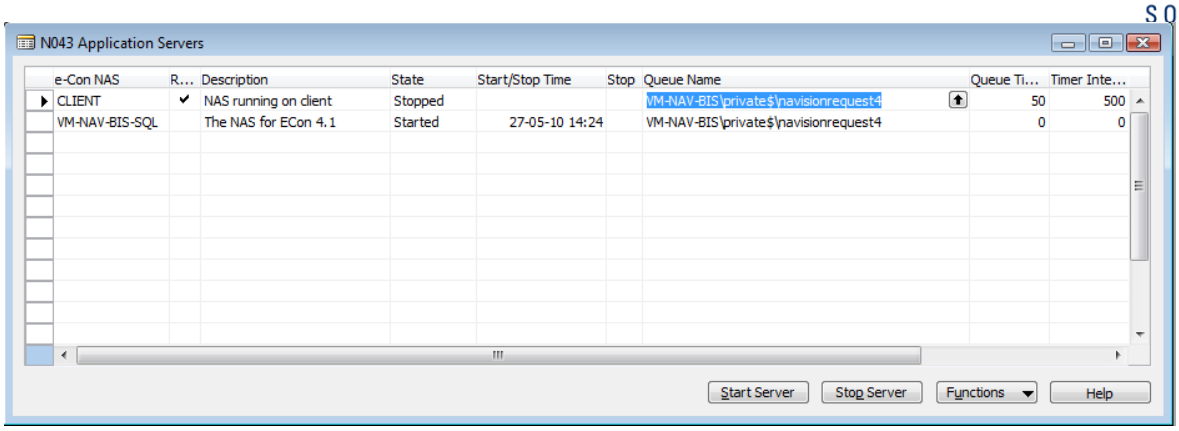


The NAS runs codeunit 1 and via an ECON parameter the codeunit ‘e-Con NAS Message Receiver’ is called. This is also a single-instance codeunit; the program runs in a cycle waits for the next MSMQ message to arrive. The Queue timeout can be changed manually. After the queue timeout the codeunit is activated again by a running timer. The NAS runs dedicated for e-Con and no other external components are needed to react on the MSMQ events; this makes installation and maintenance easier. Since we don’t use external components we can also use any normal Navision client to run the ‘e-Con NAS Message Receiver’ codeunit.

7.3 Get the e-Con 2012 Navision Integration to work

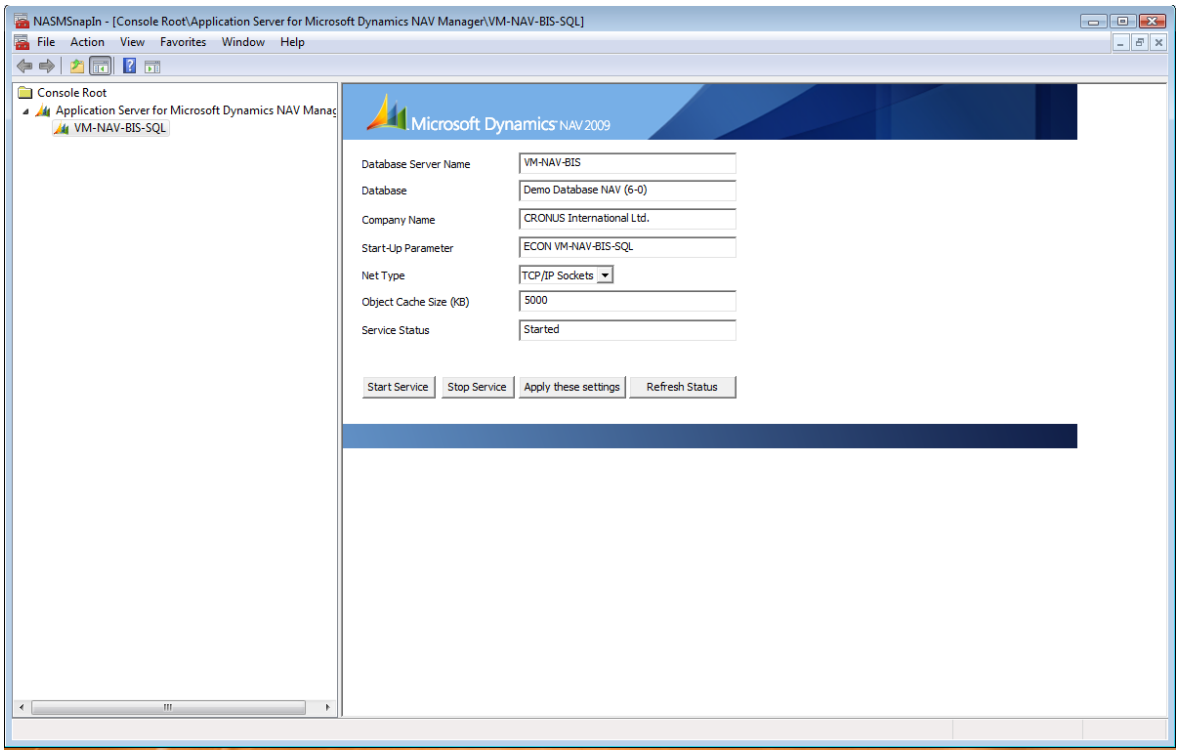
7.3.1 Start the NAS service

The NAS installation also installs a small component on your client, the ‘nascontrol 1.0 Type Library’. This control is used to start/stop a NAS service from within Navision. Run form ‘eCon NAS Handling’ from the e-Con Menu / Setup in Navision to initialize the NAS service.



Fill in a record with the NAS name as defined in the installation. Button <Start Server> changes the state to 'Starting', initializes the NAS parameters and tries to start the NAS service. After the NAS has been properly started, the NAS will change the state to 'Started' and will update the 'Start/Stop Time'. Starting a NAS service is a rather time consuming process, therefore a progress bar is displayed for 1 minute while the startup proceeds. Every 5 seconds it will check whether the NAS was able to change the state to 'Started' or not. After one minute the programs will advise to check the Windows Event Viewer, a shortcut is located under the Functions button. The 'Windows Service Status' also located under the Functions button can be used to retrieve the current status of your NAS service in the Windows OS environment. Be aware the Windows status can be 'Started' while the form still states 'Starting'. This means that, although the NAS service is running properly, it is not able to initialize the Navision Attain environment in a proper way. Please check the event viewer for additional information.

The 'Application Server Manager for Microsoft Dynamics NAV' that can be located via de Administrative Tools can also be used to view the status of your NAS service. Your NAS has to be added to the Console Root in the tree control on the left hand side. All variables (Server, Company Name, Start-Up Parameter Value, Net Type and Object Cache Size) are initialized from within Navision Attain. After the NAS service has been initialized and is started the 'Application Service Manager' might look like this:



7.3.2 Stop the NAS service

The ‘Stop’ indicator in the ‘eCon NAS Handling’ form will stop the Application Server after all processing has been done and a timeout of Queue Timeout milliseconds. The ‘Stop Server’ button in the ‘eCon NAS Handling’ form will also sent a special high-priority ‘STOPNAS’ message to the NAS via the Message Queue to force a NAS shutdown as soon as possible. The NAS will stop processing and the normal ‘Stop Service’ command will be executed to stop the NAS service. On stopping the NAS will change the state to ‘Stopped’ and will update the ‘Start/Stop Time’.

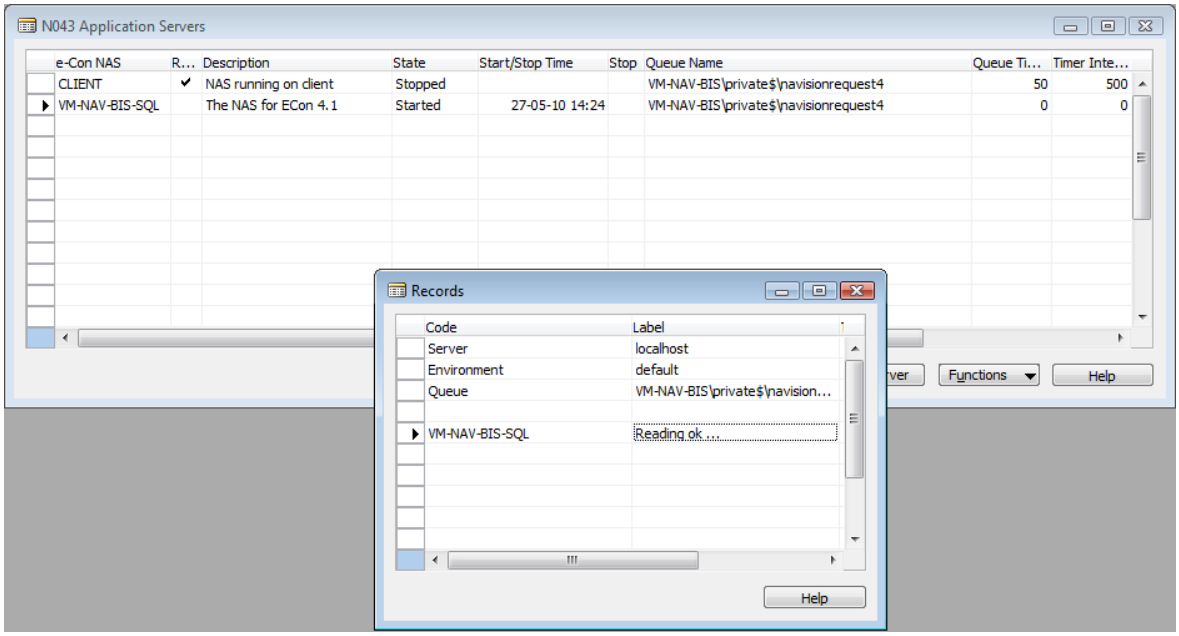
7.3.3 Navision Integration via a normal client

If an Application server is flagged as ‘Run On Client’ then codeunit ‘e-Con NAS Message Receiver’ will be running in the Navision client process. If the Queue timeout is set to a relatively small amount of time (e.g. 50 ms) then the client can also be used for other processing. Be aware that it will not be possible to save and process a configuration on a client acting as an application server. But it is possible to do any other action via the e-Con Studio.

7.4 Additional Features

7.4.1 Test NAS Configuration

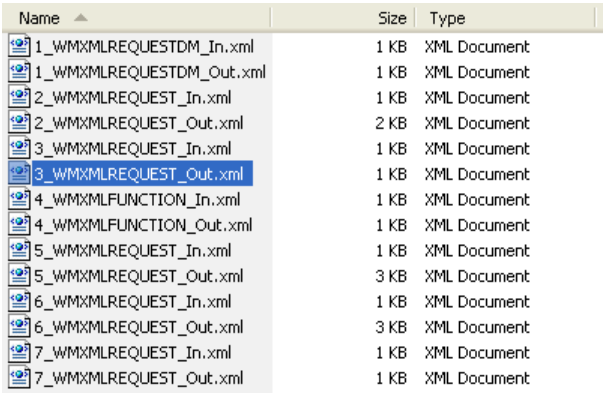
The ‘eCon NAS Handling Form’ has a function ‘Test Configuration’. This function checks whether a NAS with status is ‘Started’ can be reached or not. The replies can be ‘Reading ok’, ‘Not responding’ or ‘Missing request. Other NAS is reading the same queue’.



7.4.2 Request / Response Logging

The e-Con 2012 requests and responses for the NAS are represented as XML documents placed in the body of the messages in the Message Queue. Via the ‘eCon NAS Handling’ form these XML documents can be saved in a folder for debug purposes. Before the NAS (or client) is started field ‘XML Input / Output Logging’ should be flagged on and existing folder must be entered in field ‘Log Directory’.

After running a certain model the folder might look like this:



Name	Size	Type
1_WMXMLREQUESTDM_In.xml	1 KB	XML Document
1_WMXMLREQUESTDM_Out.xml	1 KB	XML Document
2_WMXMLREQUEST_In.xml	1 KB	XML Document
2_WMXMLREQUEST_Out.xml	2 KB	XML Document
3_WMXMLREQUEST_In.xml	1 KB	XML Document
3_WMXMLREQUEST_Out.xml	1 KB	XML Document
4_WMXMLFUNCTION_In.xml	1 KB	XML Document
4_WMXMLFUNCTION_Out.xml	1 KB	XML Document
5_WMXMLREQUEST_In.xml	1 KB	XML Document
5_WMXMLREQUEST_Out.xml	3 KB	XML Document
6_WMXMLREQUEST_In.xml	1 KB	XML Document
6_WMXMLREQUEST_Out.xml	3 KB	XML Document
7_WMXMLREQUEST_In.xml	1 KB	XML Document
7_WMXMLREQUEST_Out.xml	1 KB	XML Document

There are five types of XML requests / responses:

XML requests / responses	
WMXMLREQUEST	Normal database access: GetValue, FillOptions etc
WMXMLREQUESTDM	Decision Matrix Requests
WMXMLFUNCTION	Special User Defined Functions: GetFirstFreeNo
TIMDREQUEST	Metadata request for e-Con studio
TIREPREQUEST	Repository request for models and configurations

The XML request file as a result of an e-Con GetOptions rule could look like:

```
<?xml version="1.0" ?>
- <wmxmlrequest>
    <action>read</action>
    <filloptions>true</filloptions>
  - <tables>
    - <table id="99000754">
      - <filters>
          <filter field="5" value="F" />
        </filters>
      - <fields>
          <field id="1" />
          <field id="3" />
          <field id="8" />
          <field id="5" />
        </fields>
        <offset start="0" count="" />
      </table>
    </tables>
  </wmxmlrequest>
```

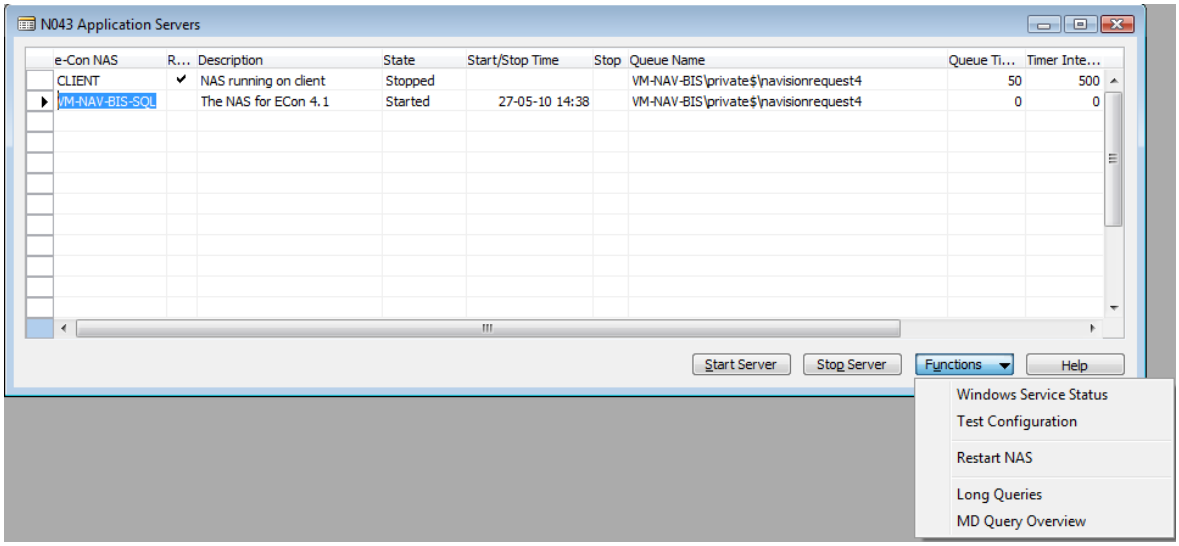
It consists of the read action, the table and the query in the filters tag. The fields tag gives the fields that have to be filled for each result record.

The XML response file contains the query result.

```
- <wmxmlresponse>
    <action>read</action>
  - <tables>
    - <table id="99000754">
      - <record id="100">
        - <fields>
            <field id="1">100</field>
            <field id="3">Assembly department</field>
            <field id="8" />
            <field id="5">F</field>
          </fields>
        </record>
      - <record id="300">
        - <fields>
            <field id="1">300</field>
            <field id="3">Painting department</field>
            <field id="8" />
            <field id="5">F</field>
          </fields>
        </record>
      </table>
    </tables>
    <status>ok</status>
    <reqtime>100</reqtime>
  </wmxmlresponse>
```

The status in this document should always be ‘ok’ even if an empty set is returned. Only erroneous queries can return a failure. The reqtime gives the time in milliseconds that was needed to query the database and build the response XML. The ‘eCon NAS Handling Form’ has a function ‘Long Queries’. This function gives a quick overview of all response query documents with a request time greater or equal than a given value. The input XML trace files can be processed interactively by running codeunit 11002524 ‘N043 NAS Metadata Handler’ or codeunit ‘N043 NAS Message Handler’. The process will ask for the XML input file and generate a separate ’xxx _out.xml’ output file in the same folder.

The Metadata and Repository request can be checked via the “Functions” – “MD Query Overview” on the NAS.

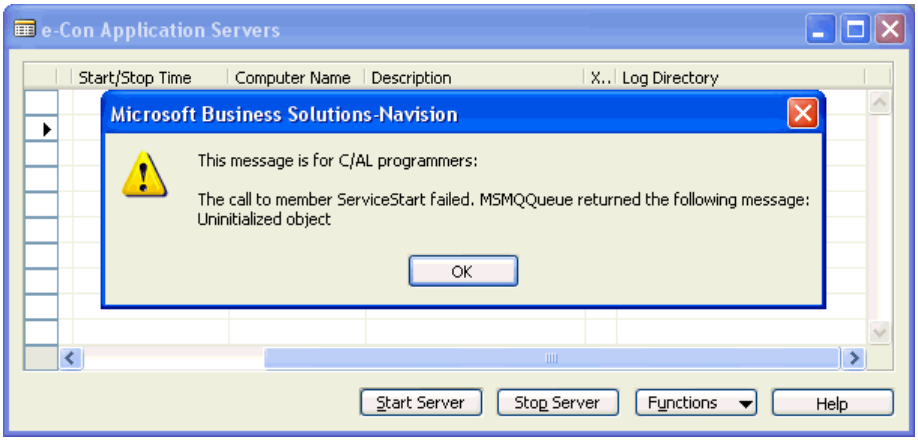


7.5 Troubleshooting the e-Con 2012 Navision Integration

In general there is one rule that stands above all other rules when initializing the Navision Application Server for e-Con 2012: “Have Patience”. Stopping and Starting the NAS as a service and initializing the Queue’s might take some time.

Some error messages that you might get:

- After stopping and starting the NAS. Have patience and try it again in one minute.



- Starting the NAS could give these 2 warnings in your Event Viewer:

> No service could be started with the Start-Up Parameter ECON C073_NAS370
> For more information, see Help and Support Center at
> http://go.microsoft.com/fwlink/events.asp.

And

> The Navision Application Server C073_NAS370 could not initialize properly.
> The server will attempt to initialize every 30 seconds until this is successful.
> For more information, see Help and Support Center at
> http://go.microsoft.com/fwlink/events.asp.

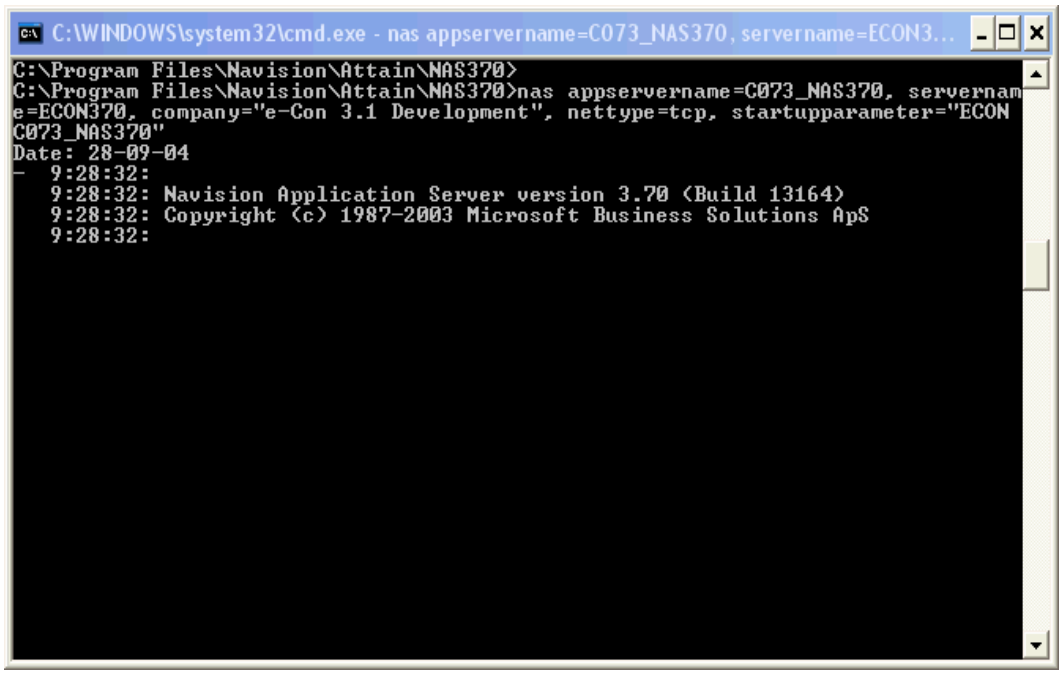
Have patience, most of the time it will run after 30 seconds, if it doesn’t then the same warnings will be created a number of times.

- Forgotten to add a Windows login with proper roles to your database:

> Microsoft Business Solutions-Navision has not been set up to allow you to use Windows login. Contact your system manager.
> For more information, see Help and Support Center at
> http://go.microsoft.com/fwlink/events.asp.

The Navision Application Server only runs with Windows login.

- You might run into trouble running the NAS as a service. Normally that has nothing to do with the NAS but could be a result of your system configuration; e.g. insufficient authorizations. In such a case you could first try to run the NAS from a DOS command box. The command line arguments are described in document 'Installation & System Management: Microsoft Business Solutions-Navision Application Server' that can be found on the Navision Attain installation CD.



8. How to create a new e-Con environment

IMPORTANT NOTE:

Using the DMI tool might be useful to create the different environments!

DMI will create the different environments with e-Con webfolders, settings and message queues.

Not created by DMI are the NAV companies and NASses.

Below is a description of the manual creation of a new environment.

Normally there are three different e-Con environments, production, test and develop. After installing e-Con there is one environment available the so called 'default' environment. This section describes how to create other environments.

Basically the creation of a new environment exists of steps:

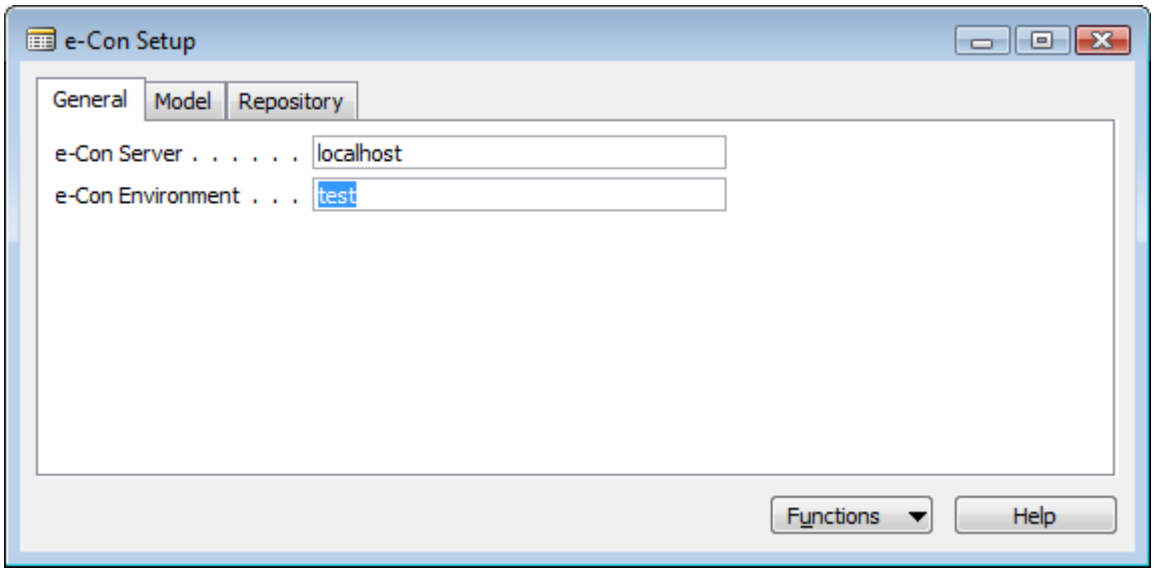
1. Make a new e-Con environment with his own datastore
2. Add new queues
3. Make a new e-Con web folder
4. Install a new Navision Application Server

In the next part these steps will be described more in detail.

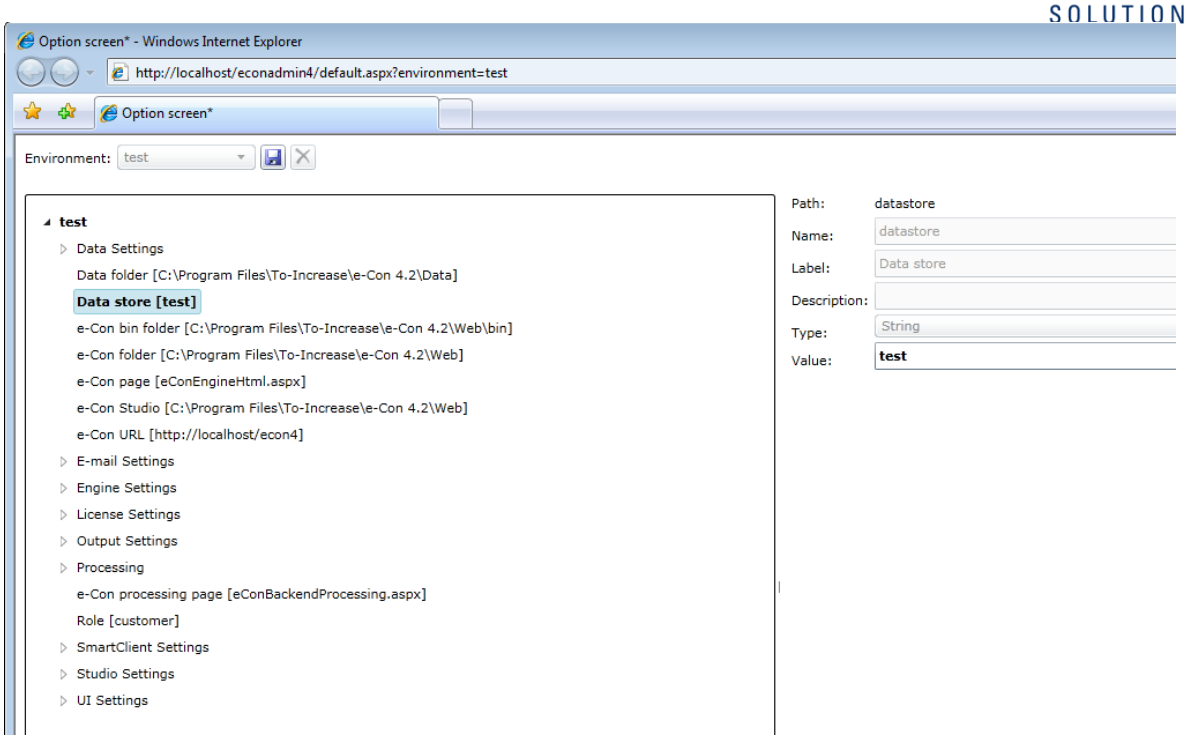
8.1 New e-Con environment

To create a new e-Con environment the next steps must be performed:

- Open the e-Con Setup window, in the MS Dynamics NAV Main Menu, click e-Con, Setup, e-Con setup.
- Enter the new name for the environment in the 'environment' field, e.g. test.



- Open the new environment by choosing the 'Edit environment' function from the 'Functions' button.
- Select the 'Data store' setting and enter a new data store in here, e.g. test as well.



- Save the changes by clicking the 'Save' button on top and close the e-Con settings form.
- Return to the 'e-Con Set up' in NAV and perform the 'Create folder Structure' option from the 'Functions' button to create the required folders in a new data store folder "test".

8.2 New Queues

To make sure that messages (data requests) from one environment doesn't mix up with messages from another it's required to set up individual queues for every environment. During the e-Con installation the following queues are already created:

- Navisionpost4
- Navisionrequest4
- Navisionresponse4

For the new environment other queues has to be added.

- Add minimal 2 new queues, the response and request queue. Use names like Navisionrequest4test, Navisionresponse4test. (Read chapter 5 for more information about settings up queues)
- Open the e-Con settings by clicking the 'Edit environment' button in the 'e-Con Setup'.
- Change the following settings according to the new queue names:
    - In "Data settings" the "General connection"
    - In "Data settings" – "MS Dynamics" the "MS Dynamics connection"

Examples:

General connection old:

driver=Navision;server=localhost;requestqueue=VPC-ECON4-AX4\private$\navisionrequest4;responsequeue=.\private$\navision{uniqueid}response4

General connection new:

driver=Navision;server=localhost;requestqueue=VPC-ECON4-AX4\private$\navisionrequest4test;responsequeue=.\private$\navision{uniqueid}response4test

- Save the settings.

8.3 New web folder

Windows Server 2003

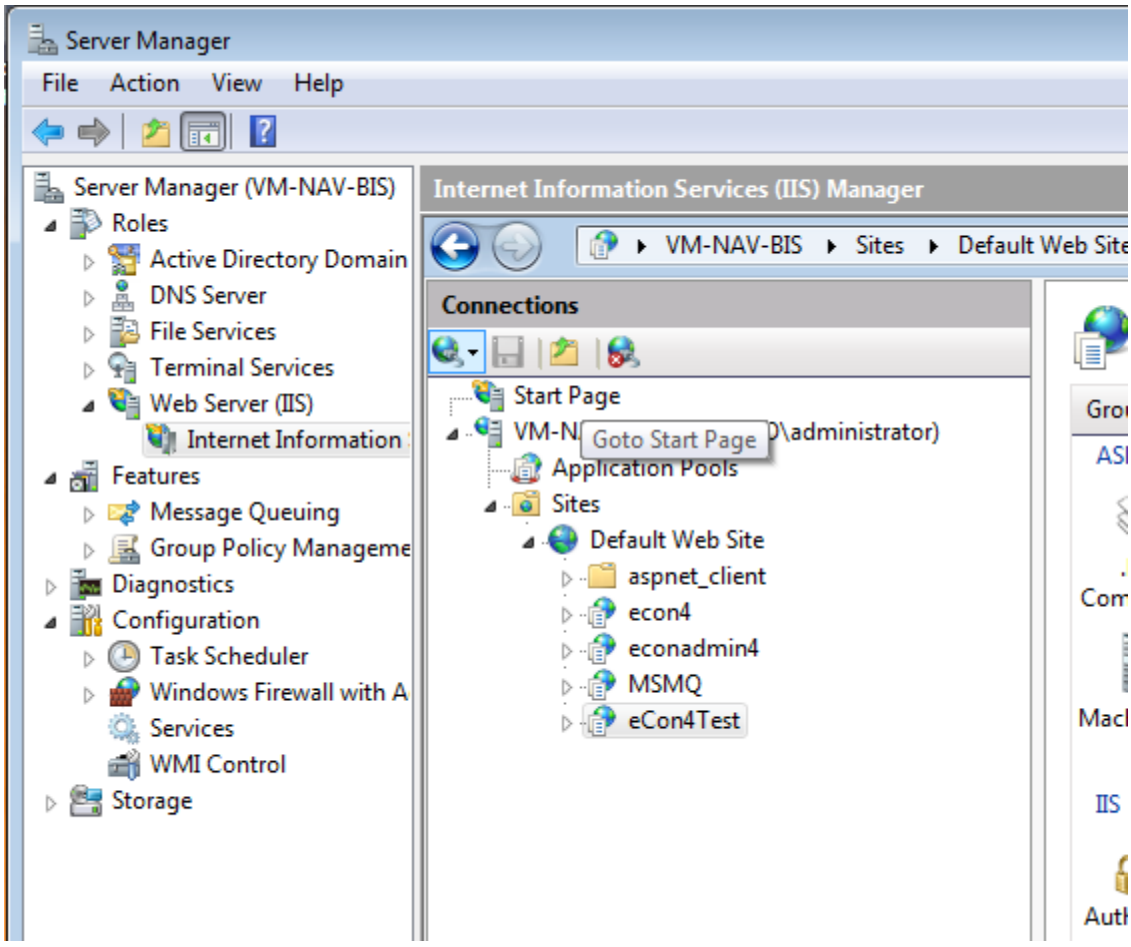
To avoid that building of a model in one environment will interrupt the other environment a separate .NetASP application domain must be created as well. This can be done by duplicating the e-Con web folder and share.

- Copy the e-Con web folder and give it a new name e.g. eConTest. (The e-Con web folder is by default 'C:\Program Files\e-Con Solutions\e-Con 2012\Web\'
- Create a web share for this folder and give it a new name e.g. eCon4Test (Make sure that the security and permissions are according the original web folder)

Windows Server 2008

To avoid that building of a model in one environment will interrupt the other environment a separate .NetASP application domain must be created as well. This can be done by duplicating the e-Con web folder and share.

- Copy the e-Con web folder and give it a new name e.g. eConTest. (The e-Con web folder is by default 'C:\Program Files\e-Con Solutions\e-Con 2012\Web\'
- Add a default website, via Add application on Default Web Site, for this folder and give it a new name e.g. eCon4Test (Make sure that the security and permissions are according the original web folder)



Note: It is also best practice to add a new Application pool for the new default web site!

Next steps

- Open the e-Con settings by clicking the ‘Edit environment’ button in the ‘e-Con Setup’.
- Change the following settings in there:

Folder	Setting	Example
Output settings	Output folder	C:\Program Files\e-Con Solutions\e-Con 2012\Web**Test**\Output
UI settings	Label URL	C:\Program Files\ e-Con Solutions\e-Con 2012\Web**Test**\Labels.xml
Data settings	e-Con folder	C:\Program Files\ e-Con Solutions\e-Con 2012\Web**Test**
Data settings	e-Con bin folder	C:\Program Files\ e-Con Solutions\e-Con 2012\Web**Test**\bin
Data settings	e-Con URL	http://localhost/econ4**Test**

- Save the settings and exit them.
- Generate the models.

8.4 New Navision Application Server (NAS)

Since the Navision Application Server is running dedicated for one environment a new Navision Application Server must be installed as well.

- Install a new Navision Application Server. Read chapter 7 for more details about this topic.
- Go to the ‘e-Con NAS Handling’ form in NAV, can be found in e-Con – setup – e-Con NAS Handling.
- Select the right queue for the ‘Queue name’ setting. Use the dropdown to select this queue.